UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

321.16 7590 06/20/2008 WOOD, PHILLIPS, KATZ, CLARK & MORTIMER 500 W. MADISON STREET EXAMINER

LEESER, ERICH A

ART UNIT PAPER NUMBER

1624 DATE MAILED: 06/20/2008

500 W. MADISON STREET SUITE 3800 CHICAGO, IL 60661

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		. (CONFIRMATION NO.
10/539,708	12/30/2005	Margaretha Bakker		ABI	310010P2080US		4819
TITLE OF INVENTIONA	2 CURCUTTUTED 2	DILIVIDRO THIENOGO 2 DIDVIDINI A ONE	DEDIVAT	PTS/E/C	DRODUCTION	AND	TIPE

THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	09/22/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

maintenance fee notificat	ions.		SUE FEE and PUBLICAT orders and notification of (a) specifying a new corre				
CURRENT CORRESPONDE	ENCE ADDRESS (Note: Use Bl	ock 1 for any change of address) No Fee pap	te: A certificate of (s) Transmittal. This ers. Each additional	mailing is certifi I paper,	can only be used for icate cannot be used for such as an assignme ling or transmission.	or domestic mailings of the for any other accompanying ont or formal drawing, must
32116	7590 06/20	/2008	nav			_	
500 W. MADISO SUITE 3800		ARK & MORTIN	IER I he Sta add trar	ereby certify that thi	is Feets	of Mailing or Trans Transmittal is being ficient postage for first ISSUE FEE address 273-2885, on the d	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
CHICAGO, IL 6	1000						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	t .	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/539,708	12/30/2005		Margaretha Bakker		AB	B10010P2080US	4819
TITLE OF INVENTION THEREOF	ON: 3-SUBSTITUTED	3,4-DIHYDRO-THIE	NO[2,3-D]PYRIMIDIN-4-	ONE DERIVAT	IIVES,	PRODUCTION A	ND USE
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0		\$1740	09/22/2008
EXAM	INER	ART UNIT	CLASS-SUBCLASS]			
LEESER, I	ERICH A	1624	514-267000	_			
	ondence address (or Cha 1/122) attached. cation (or "Fee Address" 2 or more recent) attach	registered attorney or agent) and the names of up to 2 registered patent attorneys or agent). If no name is 3 listed, no name will be printed.					
PLEASE NOTE: Unle recordation as set forth (A) NAME OF ASSIC	ess an assignee is identi n in 37 CFR 3.11. Comp BNEE	ified below, no assigne oletion of this form is N	e data will appear on the p OT a substitute for filing an (B) RESIDENCE: (CIT!	ontent. If an assign assignment. Y and STATE OR C	OUNT	RY)	
Please check the appropri	ate assignee category or	categories (will not be	printed on the patent):	Individual	orporati	on or other private gro	oup entity Government
4a. The following fee(s) are submitted: Issue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Advance Order - # of Copies Advance Order - # of							
	SMALL ENTITY statu	is. See 37 CFR 1.27.	b. Applicant is no lor				
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeeords of the United Sta	uired) will not be accept tes Patent and Tradema	ted from anyone other than rk Office.	the applicant; a regi	stered a	ittorney or agent; or th	ne assignee or other party in
Authorized Signature				Date			
	Typed or printed name Registration No						
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.311. The informat U.S.C. 122 and 37 CFI USPTO. Time will var den, should be sent to a O NOT SEND FEES OF	tion is required to obtain or R 1.14. This collection is es ry depending upon the indi the Chief Information Offic R COMPLETED FORMS T	retain a benefit by the timated to take 12 revidual case. Any co- er, U.S. Patent and O THIS ADDRESS	he publi minutes mment: Tradem 5. SENI	ic which is to file (and to complete, includir s on the amount of tin ark Office, U.S. Dep. O TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/539,708	12/30/2005	Margaretha Bakker	ABB10010P2080US 4819			
32116 7	590 06/20/2008		EXAM	UNER		
WOOD, PHILLIPS, KATZ, CLARK & MORTIMER			LEESER, ERICH A			
500 W. MADISO	N STREET		ART UNIT	PAPER NUMBER		
SUITE 3800 CHICAGO, IL 60661			1624 DATE MAII ED: 06/20/200	8		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 4 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 4 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)				
10/539,708	BAKKER ET AL.				
Examiner	Art Unit				
Frich A Leeser	1624				

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 2-12-08.
- 2. The allowed claim(s) is/are 1-16,18 and 22.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a)

 All b)

 Some* c)

 None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Thereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date ______

 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

/James O. Wilson/ Supervisory Patent Examiner Art Unit 1624 Application/Control Number: 10/539,708 Page 2

Art Unit: 1624

ALLOWANCE

This action is in response to Applicant's Remarks and Amended Claims in which

Applicant amended claim 16 and cancelled claims 19-21 and 23-28. Examiner previously

allowed claims 1-5, 18 and 22 in the Office action dated November 8, 2007. Claims 1-16, 18

and 22 are allowed.

Claim Rejections - 35 USC § 112, first paragraph

This rejection is now moot after Applicant's cancellation of claims 19-21 and 23-28.

Claim Rejections - 35 USC § 112, second paragraph

This rejection is now moot after Applicant's amendment of claim 16.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

The Application has been amended as follows:

Abstract: HAS BEEN AMENDED TO READ AS FOLLOWS:

Application/Control Number: 10/539,708 Page 3

Art Unit: 1624

ABSTRACT

3-Substituted 3,4-dihydrothieno[2,3-d]pyrimidin-4-one derivatives, production and use thereof. The invention relates to 3,4-dihydrothieno[2,3-d]pyrimidin-4-one derivatives which are substituted in position 3 by 5-membered heteroaryl which may be fused to an aryl or heteroaryl radical, where the heteroaryl and, if appropriate, the fused aryl or heteroaryl radical may have 1, 2 or 3 substituents selected independently of one another from C₁₋₅-alkyl, C₁₋₅-alkoxy, C₁₋₅-alkylthio, halogen, CN, halo-C₁₋₅-alkyl, halo-C₁₋₅-alkoxy, hydroxy, -NH₂, -N(R6)₂, -NH(R6), aryl, aryloxy, aralkyl, aralkyloxy and heteroaryl, where the substituents aryl, aryloxy, aralkyl, aralkyloxy and heteroaryl may have 1, 2 or 3 substituents selected independently of one another from C₁₋₅-alkyl, C₁₋₅-alkoxy, C₁₋₅-alkylthio, halogen, CN, halo-C₁₋₅-alkyl, halo-C₁₋₅-alkoxy, hydroxy, -NH₂, -N(R6)₂ and -NH(R6). The preparation and use of these derivatives, especially for therapeutic purposes, e.g. for the treatment of depressions, are likewise described.

Reasons for Allowance

The following is an Examiner's statement of reasons for allowance: the elected invention is free of the prior art and the form of the application is acceptable. The closest prior art is Steiner et al., United States Patent No. 6,159,981. The reference teaches 3-substituted pyrido[3',4':4,5]thieno[2,3-D]pyrimidine derivative compounds instead of the 3-substituted 3,4-dihydrothieno[2,3-d]pyrimidin-4-one derivative compounds of the instant application. The difference between the compounds of the reference and the compounds of the instant application is R² of the reference must be six-membered rings whereas R3 of the present claims is limited to a five-membered ring. Therefore, the claims are free of prior art.

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Erich A. Leeser whose telephone number is 571-272-9932. The Examiner can normally be reached Monday through Friday from 8:30 to 6:00 EST.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. James O. Wilson can be reached at 571-272-0661. The fax number for the organization where this application is assigned is 571-273-8300.

Art Unit: 1624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197. If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erich A. Leeser
Patent Examiner, Art Unit 1624
United States Patent and Trademark Office
400 Dulany Street, Remsen 5C11
Alexandria, VA 22314-5774
Tel. No.: (571) 272-9932

/James O. Wilsom/ Supervisory Patent Examiner, Art Unit 1624 James O. Wilson Supervisory Primary Examiner, Art Unit 1624 United States Patent and Trademark Office 400 Dulany Street, Remsen 5A11 Alexandria, VA 22314-5774 Tel. No.: (57) 272-0661